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AGILENT TECHNOLOGIES, INC.  
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EXAMINER
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WEST, JEFFREY R

ART UNIT	PAPER NUMBER
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2857

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12/13/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

09/955,796

Applicant(s)

SCHLOTZHAUER ET AL.

Examiner

Jeffrey R. West

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-29 and 31-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 and 31-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 27, 2007, has been entered.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement because it recites "associating the function call instruction with the user-defined variation function prior to execution of the measurement process but after the computer program has been compiled to executable code".

The specification, however, does not provide any indication that the function call is associated with the user-defined variation function after the computer program has been compiled to executable code." The only mention of compiling in the instant specification is with respect to the known art, specifically:

Prior measurement systems have attempted to address some of these needs. For example, the user may be supplied with the source code for the standard tasks and allowed to modify and recompile the code. This has several limitations. Firstly, the user must be instructed on how to make the modifications and recompile the code. Secondly, the user must purchase the tools to do this. Thirdly, the user may introduce errors in the code for the standard task, which increases the amount of technical support required by the user. Fourthly, any proprietary methods contained within the source code for the standard task will be disclosed. (page 2, lines 7-15)

This section does suggest that the instant invention desires to overcome the shortcomings of requiring the user to recompile the code, however, such a mention falls short of adequately supporting "associating the function call instruction with the

user-defined variation function...after the computer program has been compiled to executable code"

Additionally, the most relevant section of the specification is on page 8, lines 6-24 which states:

The arrow 214 denotes a call from the calling function to the standard measurement process to register the interface of the process modification module with a function named make\_variation in the measurement process. This may take the form, for example, of the function call

register\_variation (interface: Process\_Modification)

In this embodiment, this indicates that when the variation point is reached, the interface should be serviced by a function within the Process\_Modification module.

The arrow 216, denotes invocation of the standard measurement process, and may take the form of the function call

run () .

The duration of the standard measurement process is denoted by the block 218.

At some point in the standard measurement process, a variation point is reached and, as indicated by the arrow 220, control is transferred to the Process\_Modification module. Parameters are passed using the interface registered at 214. The call may take the form

Make\_variation(variationID:String, data:String).

This section of the specification does not indicate that the computer program of the standard measurement process has already been compiled to executable code. Rather, this section does indicate that before the standard measurement process can be executed, an interface of the process modification module must first be registered in order for the standard measurement process to know what function to invoke. As such, the claimed invention is not sufficiently supported to indicate to one having ordinary skill in the art that the inventor(s), at the time the application was filed, had possession of the claimed invention

Claims 2-20 are rejected under 35 U.S.C. 112, first paragraph, because they incorporate the lack of written description present in parent claim 1.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 7-9, 14-29, 31-33, and 36-40, as may best be understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,907,557 to Perez et al. (incorporating by reference U.S. Patent No. 6,401,220 to Grey et al.) in view of U.S. Patent No. 6,449,741 to Organ et al.

MPEP §2163.07(b) [R-3]: Incorporation by Reference: Instead of repeating some information contained in another document, an application may attempt to incorporate the content of another document or part thereof by reference to the document in the text of the specification. The information incorporated is as much a part of the application as filed as if the text was repeated in the application, and should be treated as part of the text of the application as filed.

With respect to claim 1, Perez discloses a method for a user of a measurement process to cause a variation in the measurement process (Grey et al.; column 2, lines 55-60 and column 11, lines 36-40), the measurement process comprising a sequence of operations controlled by a computer program (Grey et al.; column 11, lines 41-56 and column 12, lines 6-15) containing a variation point at which a function call instruction is inserted by a designer of the computer program (Grey et

al.; column 12, lines 41-53) to pass control to a user-defined variation function (Grey et al.; column 14, lines 52-65), said method comprising determining the variation to the measurement process (Grey et al.; column 13, lines 50-58), providing a user-generated process modification software module comprising the user-defined variation function for causing the variation (Grey et al.; column 12, lines 41-53 and column 14, lines 52-65), and associating the function call instruction with the user-defined variation function prior to execution of the measurement process (Grey et al.; column 13, lines 50-58 and column 14, line 52 to column 15, line 9) but after the computer program has been compiled to executable code (i.e. function calls associated with compiled code modules) (column 3, lines 22-32 and column 13, lines 50-58), generating an executable variation of the measurement process (Grey et al.; column 2, lines 55-60, column 11, lines 36-40, and column 13, lines 50-58) wherein the function call instruction passes control to the user-defined variation function when the variation point in the computer program is reached (Grey et al.; column 13, lines 50-58 and column 14, line 52 to column 15, line 9).

Perez also discloses that the user is permitted to modify the measurement process by configuring parameters (Perez et al.; column 4, lines 49-63 and column 10, line 57 to column 11, line 14), such as the parameters used through the user-defined variation function (Grey et al.; column 14, lines 52-65), while preventing the user from modifying the measurement process through particular sequences (Perez et al.; column 4, lines 49-63 and column 10, line 57 to column 11, line 14).

With respect to claims 2-4 and 31-33, Perez discloses that the process modification software module further comprises an interface servicing element that services an interface realized by the measurement process with the interface operating at a binary protocol (Grey et al.; column 13, lines 7-15).

With respect to claims 7 and 36, Perez discloses that said interface is determined by the user and is identified and passed into said measurement process (Grey et al.; column 13, lines 7-30).

With respect to claims 8 and 37, Perez discloses that said process modification software module is one of a computer program conforming to a software component specification for distributed applications or dynamically linked library (i.e. C, C++, JAVA, Visual Basic) (Grey et al.; column 13, lines 53-57 and column 14, lines 66-67).

With respect to claim 9, Perez discloses that the measurement process and the process modification software module are executed in a shared computer memory space (i.e. the test executive software performs the measurement and the measurement modification) (Grey et al.; column 11, lines 41-56 and column 58, lines 60-67)

With respect to claims 14-18 and 24-28, Perez discloses that said variation comprises modification of data (Grey et al.; column 15, lines 11-14) received from the variation function including one or more numerical parameters (i.e. voltages) (Grey et al.; column 30, lines 49-52 and column 46, lines 30-35), selectable alternatives of control parameters (Grey et al.; column 19, lines 33-39), alteration of



a configuration of the device under test (Grey et al.; column 18, lines 62-63), or causing input signals to be supplied to the device under test (Grey et al.; column 10, line 62 to column 11, line 6 and column 19, line 64 to column 20, line 5).

With respect to claim 21, Perez discloses a computer readable medium containing program instructions, generated by a program designer, for carrying out the associated method (Grey et al.; column 11, lines 41-56).

With respect to claims 22 and 23, Perez discloses passing measurement data to the function call (Grey et al.; column 14, lines 37-50).

With respect to claim 29, Perez discloses that the function call instruction invokes an interface (Grey et al.; column 12, lines 41-47).

With respect to claims 19, 20, and 38, Perez discloses a plurality of variation points that access the user for the reception of measurement data using a plurality of application programming interfaces wherein the measurement data is provided by a plurality of user-defined variation functions (i.e. the user-defined variation functions are applicable anywhere in the sequence as well as in multiple concurrently executed sequences) (Grey et al.; column 13, lines 16-25 and 32-44 and column 14, lines 52-65).

With respect to claim 39, since the function calls disclosed by Perez are in the instruction code, operable to control the measurement process at a variation point in the code, and allows corresponding user input to modify the measurement process, it is considered inherent that the designer of the instruction program has anticipated that the user may want to interact with or modify the measurement process because

the designer of the code would have eliminated the possibility of user intervention and would not have provided user prompts if such interaction was not desired.

With respect to claim 40, Perez discloses a measurement system comprising a physical interface operable to supply signals to a device under test and receive signals from a device under test (Grey et al.; column 10, line 51 to column 11, line 34).

As noted above, the invention of Perez teaches many features of the claimed invention and while the invention of Perez does teach preventing the user from modifying the measurement process through particular sequences, Perez does not explicitly indicate that the program designer prevents the user from modifying the measurement process through the source code, thereby only allowing the user to modify the measurement process when desired (i.e. programmed) by the designer.

Organ teaches a single platform electronic tester comprising means for controlling testing of a DUT (column 4, lines 26-34) using a program executed by a user (column 4, lines 45-55) wherein the user is allowed to arrange the flow of test execution (column 4, lines 56-64) for performing measurements (column 6, lines 29-32) while the operator is allowed to selectively control modification of the test by preventing the user from modifying the test/measurement process/program (column 13, lines 30-32 and column 14, lines 13-17).

It would have been obvious to one having ordinary skill in the art to modify the invention of Perez to explicitly indicate that the program designer prevents the user from modifying the measurement process through the source code, thereby only

allowing the user to modify the measurement process when desired (i.e. programmed) by the designer, as taught by Organ, because Organ suggests that the combination would have improved the operation of Perez by allowing increased control by the designer to insure that only those authorized can edit the source code of the program (Organ; column 13, lines 30-32 and column 14, lines 13-17) and thereby reduce the chance of a user improperly editing the program, as is recognized as being a problem by Perez (Perez; column 10, line 57 to column 11, line 14).

7. Claims 5, 6, 10-13, 34, and 35, as may best be understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Perez in view of Organ and further in view of U.S. Patent Application Publication No. 2002/0026514 to Ellis et al.

As noted above, the invention of Perez and Organ teaches many of the features of the claimed invention and while the invention of Perez and Organ does teach connecting the process-modifying host computer to a plurality of specific test instruments (Grey et al., Figure 1), the combination does not specifically indicate that the measurement and process modification be carried out using two separate computers communicating using a Simple Object Access Protocol or Common Object Request Broker Architecture protocol.

Ellis teaches automated tool management in a multi-protocol environment comprising measuring/polling software located on a server computer system with corresponding processor and memory (0025) and user process control software

(0007) located on a separate remote computer (0023), wherein the process control software and the monitoring/polling software communicate over a network using predetermined protocol including Common Object Request Broker Architecture and Simple Object Access Protocol (0007).

It would have been obvious to one having ordinary skill in the art to modify the invention of Perez and Organ to include specifying that the measurement and process modification be carried out using two separate computers communicating using a Simple Object Access Protocol or Common Object Request Broker Architecture protocol, as taught by Ellis, because, as suggested by Ellis, the combination would have provided improved analysis and control by allowing input and diagnostics by a larger variety of users through remote access (0005 and 0008).

### ***Response to Arguments***

8. Applicant's arguments filed September 27, 2007, have been fully considered but they are not persuasive.

After a thorough re-reading of the applied art and careful consideration of Applicant's arguments, the Examiner maintains the outstanding rejections for the following reasons:

Applicant argues:

First, Applicant disagrees with the Examiner's reading of Organ as teaching that the user is prevented from "modifying the measurement process through the source code, thereby only allowing the user to modify the measurement process when desired".

Applicant submits that the first passage of Organ cited by the Examiner simply teaches that there is a choice of user modes between production mode and engineer mode. Other passages in Organ make it clear that the "engineering mode" encompasses access to simulation aids (col. 6 lines 8-11), the ability to create a test program out of test objects (col. 11, lines 20-22) and to make changes to the source code for the test methods (col. 12, lines 28-32), aids to develop, fine tune, and debug the test program (col. 16, lines 16-19; col. 18, lines 1-10), and signal control options for testing the DUT (Figure 23 and col. 29, lines 61- 67). The only details provided regarding the "production mode" are that it allows for the specification and control of operator variables, such as test temperature (col. 14, lines 19-22). Applicant submits that the only type of user who is prevented from "modifying the measurement process through the source code" is the production mode user, who is also clearly not allowed "to modify the measurement process when desired".

The Examiner argued in response to Applicant's communication dated 4/17/2007 that modification is permitted in the production mode taught by Organ since the "production operator is still allowed to modify the test by controlling operator variables". Applicant responds that the control of operator variables is distinctly different from modifications through the user-defined variation function, as required by Claims 1 and 21.

The Examiner first asserts that the user-defined variation function is only defined as a function "for causing the variation". Therefore, employing a broadest reasonable interpretation, a function allowing the control of operator variables can properly be considered to be a user-defined variation function. Additionally, dependent claim 16 explicitly indicates that the "variation comprises modification of one or more control parameters".

Further, the Examiner asserts that the invention of Organ is only included to teach that the program designer prevents the user from modifying the measurement process through the source code, thereby only allowing the user to modify the measurement process when desired (i.e. programmed) by the designer. The invention Perez already discloses a user-defined variation function.

Applicant argues:

The second passage of Organ cited by the Examiner teaches that operator tool 160 can be set to "prevent unauthorized access to the tools that allow modification of a test program". Applicant submits that preventing unauthorized access to the tools is not equivalent to preventing modification of the measurement process "other than through the user-defined variation function". The prevention of unauthorized access simply safeguards the software system of Organ from possible damage by one category of user. However, preventing modification of the measurement process except for one very specific type of modification involving the user-defined variation function safeguards the core of the software system from any user while simultaneously allowing that user to make significant changes within defined bounds. Claims 1 and 21 specifically require this latter type of prevention.

As noted above, the Examiner maintains that the combination of Perez and Organ teaches the limitation requiring "the user is prevented from modifying the measurement process other than through the user-defined variation function."

The Examiner also notes that the implementation of only allowing the user to modify a program at a particular location is a well-known concept. By the very nature providing a program where the user is prompted to enter some type of modification during execution, the program must have been designed in order to allow the user to enter such modification.

Applicant argues:

The Examiner points to Perez (col. 10, line 57 to Col. 11, line 14) as teaching "the desirability of reducing the chance of a user improperly editing the program". Applicant submits that the improper editing discussed in this passage does not make an exclusion in the case of the type of modification that is carried out through the user-defined variation function, as required by the Claims.

Hence, Applicant submits that neither Perez/Grey nor Organ teach the Claim limitation allowing modification of the measurement process through a user-defined variation function and preventing modifying the measurement process other than through the user-defined variation function.

The Examiner asserts that the invention of Perez is not included to explicitly teach such exclusion. The Examiner points to this passage in Perez to illustrate that the invention of Perez does consider the idea that it is important to ensure that improper modification of a program does not occur by the user, to reinforce the idea that it is common knowledge that user interaction with a program is considered and designed, and to further lend to the combination of Perez and Organ.

Applicant argues:

The Examiner admits this, but asserts that the limitation in question "is met by the combination of references, specifically with Perez disclosing the modification of a measurement process by a user and Organ teaching allowing the user to modify the measurement process when desired (i.e. programmed) by the designer while still preventing the user from modifying the measurement process otherwise". Applicant submits that at best the combination of the references would result in a measurement process that can be extensively modified, even at a source code level, by one type of user, while a second type of user is prevented from making any modifications except for setting operator variables. This does not satisfy the limitation in question, which requires only those modifications made through a user-defined variation function to be allowed.

The Examiner first notes that the claimed limitations only specify exclusion of "a user" and not "all possible users". Therefore disclosure of both one type of user that is prevented from modifying the measurement process other than through the user-defined variation function and one type of user with unlimited privileges, still reads

on the claims. Also, the Examiner again points out that claim 1 only defines the user-defined variation function as a function "for causing the variation" and claim 16 defines the variation as "modification of one or more control parameters".

Applicant argues:

With reference to Claim 21, the art cited by the Examiner does not provide an executable measurement process that calls a user function. The systems identified by the Examiner involve the user providing a routine that is compiled and becomes part of the executable variation of the measurement process.

...  
The above amendment to Claim 1 makes it clear that the user variation function is bound to the program after the computer program specifying the measurement protocol is compiled to an executable form. This limitation further differentiates the present invention from that in the cited art. The systems cited by the Examiner in Grey and Perez at best provide a scheme in which the user writes a module that is compiled with the remainder of the program and the function calls are bound at that time. Such a system requires that the designer provide the user with a source code or some intermediate code, and hence, the user could gain insight into the source code.

The Examiner disagrees and instead asserts that Grey discloses a system wherein the process associates function calls with code modules that have already been created and compiled and, as such, the compiled code modules will not reveal source code. (column 3, lines 22-32 and column 13, lines 50-58).

Applicant argues:

With respect to Claim 2 and Claim 31, the Examiner maintains that Grey (col. 13, lines 7-15) discloses that the process modification software module further comprises an interface servicing element. Applicant must disagree. The cited passage states that the overall measurement system provides runtime interfaces to certain standard packages such as Labview. However, the passage does not



teach that the module provided by the user is accessed by such an interface. Accordingly, there are additional grounds for allowing Claim 2, 31, and the claims dependent therefrom.

The Examiner asserts that if the user interacts with the measurement process in order to provide a user-generated process modification software module and "TestStand preferably includes three run-time operator interfaces 202 provided to the end user in both source and executable form" to utilize and interact with the resulting user-defined variation function, one having ordinary skill in the art would clearly recognize that the process modification software module must comprise some type of interface in order to communicate with an interface of the measurement process. If such an interface was not present, there would be no means for the measurement process to recognize and/or respond to the input by the user.

Applicant argues:

With respect to Claims 7 and 36, the Examiner maintains that Grey (col. 13, lines 7- 30) teaches that the interface is determined by the user and is identified and passed to the measurement process. The cited passage teaches that the user can re-write part of the operating system to provide a user interface in place of the standard invoices that come with the system taught in Grey. However, there is no teaching that the identity of the user interface is passed into the measurement process application. Furthermore, since Grey teaches that the new interface is part of the measurement process, there is no need to pass the identity of the user function into the process. Hence, there are additional grounds for allowing Claims 7 and 36.

The Examiner disagrees. First, the Examiner asserts that claims 7 and 36 fall short of requiring "that the identity of the user interface is passed into the measurement process application" but instead only require that the interface is determined by the user and that the resulting process identifies the interface. The Examiner asserts that Grey discloses that the user determines the interface by providing that "the user can customize one of the run-time operator interfaces 202 by modifying the source code for the program" and that one having ordinary skill in the art would recognize that in order for the program to recognize a change in the interface, it must first be identified.

Applicant argues:

Claims 19 and 20 depend from Claim 1 and additionally require that each of a plurality of variation points in the computer program be associated with one of a plurality of user-defined functions in the process modification software module. Claim 38 likewise requires a plurality of user-generated variation functions. The Examiner points to Grey col. 13, lines 16-25 as providing this teaching. Applicant submits that while this passage mentions the possibility of "multiple concurrent executions" and breakpoints, there is no teaching regarding the association of each of a plurality of variation points with one of a plurality of user-defined functions as specified in the Claims. In this regard, it should be noted that a break point turns control of the program to a user, not to a user supplied function that was bound to the software in question. Hence, Applicant submits that there are additional grounds for allowing Claims 19, 20, and 38.

The Examiner asserts that by Grey's disclosure of providing a user-generated modification software module comprising a user-defined variation function for causing variation at a point of execution and further teaching multiple concurrent

executions, such disclosure also inherently discloses a plurality of variation points with a plurality associated user-defined variation functions.

Additionally, the Examiner asserts that providing a program with a plurality of points where a user is permitted to enter information is conventional and therefore it would have been well within the knowledge of one having ordinary skill in the art, and obvious, to provide a plurality of variation points to provide the user with greater control, customization, and flexibility of the program.

Applicant argues:

With respect Claim 39, the Examiner maintains that Perez teaches that function calls are in the instruction code and hence it is inherent that the designer of the instruction program has anticipated that the user may want to interact with or modify the measurement process. The function calls provided by the user in the portion of the system written by the user are not provided by the designer at points at which the designer determined that a user might want to modify the process. Since the system allows the user to write part of the test system, the designer did not provide the calls and further could not prevent the user from providing such calls in the portion written by the user. Accordingly, Applicant submits that there are additional grounds for allowing Claim 39.

The Examiner asserts that in Perez it is not the function calls that are being written by the user, but instead it is the function calls that are causing the program to prompt the user for information. These function calls are therefore not user-generated, but designer-generated. Additionally, since the function calls allow the user to interact with the measurement process, the Examiner maintains that it is inherent that the designer of the program has anticipated that the user may want to interact with the process.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

U.S. Patent No. 6,308,326 to Murphy et al. teaches run-time modules for dynamically adjusting computer operation.

U.S. Patent No. 6,769,114 to Leung teaches methods and apparatus for preventing software modification from invalidating previously passed integration tests.

U.S. Patent Application Publication No. 2003/0046665 to Ilin teaches a reusable software component for textually supplementing, modifying, evaluating, and processing procedural logic for a compiled host program at run-time.

U.S. Patent No. 6,766,514 to Moore teaches a compiler having real-time tuning, I/O scaling and process test capability.

U.S. Patent No. 6,351,843 to Berkley et al. teaches dynamically inserting a function into an application executable at runtime.


U.S. Patent No. 6,202,043 to Devoino et al. teaches a computer based system for imaging and analyzing a process system and indicating values of specific design changes.

U.S. Patent No. 6,163,879 to Mackey teaches an interface and method for facilitating writing and modifying of lines of programming code.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. West whose telephone number is (571)272-2226. The examiner can normally be reached on Monday through Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on (571)272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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